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ABSTRACT

This report considers the National Commission to Prevent Infant Mortality's recommendations for ways for the private sector to become more involved in promoting maternal and child health. The first chapter presents demographic data on changes affecting the workforce, including statistics on women in the workforce, changing family lifestyles, national infant mortality rates, and teenage pregnancy. Chapter two provides an overview of the costs and insurance coverage involved with maternity benefits. The role of corporate maternity benefits is discussed. Chapter three, which focuses on the health of children up to 5 years of age, presents demographic information related to the use of health care, insurance coverage, immunizations, and well child care. Special health concerns of children under 5 include injuries, lead poisoning, child abuse, AIDS, mental health, and chronic illness. The final chapter of the report addresses such concerns of working parents as flexible work arrangements and child care. Comments of participants in the 1989 Washington Business Group in Health's Health Resources and Services Administration Leadership Seminar on Maternal and Child Health have been inserted into the text when relevant. A list of resources for companies interested in additional information, the seminar agenda, and the list of participants are appended. (RH)

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THE CORPORATE PERSPECTIVE ON MATERNAL & CHILD HEALTH

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INTRODUCTION

"I think it is safe to say that what happens in this country with maternal and child health is an indicator, internally to those of us who live in the United States and externally to those around the world, of our values, how we view the role of this nation in the next century and certainly the degree to which we will be viewed as a country with compassion and a sense of investment in the future of its own people."

Willis B. Goldbeck
President
Washington Business Group on Health

Employers are more critically concerned with the issues surrounding maternal and child health than ever before. Indeed, businesses, both large and small, seeking to protect their economic viability, are rapidly realizing the importance of wisely investing in the future's workforce, today. Recognizing this fact, the Office of Maternal and Child Health (OMCH), a component of the Health Resources and Services Administration (HRSA), and the Washington Business Group on Health (WBGH) held a Leadership Seminar on November 8-9, 1989 in Washington, DC to examine the status of U.S. maternal and child health efforts, learn about corporate initiatives in the area, and discuss opportunities for public and private sector collaboration. As noted by Dr. Merle McPherson, Director of the OMCH Division of Services for Children with Special Needs in her opening comments:

"What we want to do over the next two days is to remind ourselves what we have accomplished in the health of mothers and children in this country; but also recognize that statistics tell us we are not doing the kind of jobs we need to do and we have some very serious problems that need joint solutions. I think we need to talk about that and then to set a vision of where we want to be as we walk into the 21st Century."

Dr. Merle McPherson
Director
Division of Services for Children
with Special Health Needs, OMCH

A number of demographic and economic trends have urgently forced employers to focus on issues concerning the health of our country's mothers, infants, children, and families. More women entering the workforce, escalating health care costs, changing lifestyles, and rising rates of teenage pregnancies have all caused employers to rethink their traditional benefit plans and employment policies.

These trends, coupled with the lack of improvement in our national infant mortality rate, high rates of low birth weight and lack of insurance coverage for women and infants have compounded the urgency and importance of the private sector's role in improving the health of women and children.

A recent report by the Congressionally chartered National Commission to Prevent Infant Mortality (NCPIM) recommended three major ways in which the private sector can become more involved in

promoting maternal and child health: 1) Develop comprehensive health benefit policies that promote maternal and child health; 2) Become involved with others in the private sector, as well as the public sector, to help generate interest in filling in gaps in maternal and child health care; and 3) Become leaders in promoting health and well-being for women and infants.[1]

This report addresses each of the areas recommended by NCPIM and was initially prepared as background information for attendees at the November meeting. The final document includes comments from participants at the WBGH/HRSA Leadership Seminar which have been inserted into the report where relevant. In the first chapter, demographic changes which affect the workforce are presented. These include statistics on women in the workforce, changing family lifestyles, national infant mortality rates and teenage pregnancy.

The second chapter provides an overview of the costs and insurance coverage of maternity benefits in this country. The particular role of corporate maternity benefits, such as disability, parental leave, prenatal care, and programs that alter the work environment are also discussed.

The third chapter of the report focuses on the health of children up to age five. This focus was chosen in order to limit the meeting discussion to pre-school children. While arbitrary, the meeting sponsors felt time constraints limited the ability to comprehensively discuss issues related to children of all ages. Meeting participants did recognize the difficulty of segmenting children's concerns by age rather than examining them as part of a continuum.

Demographic information related to children's health status, health care utilization and insurance coverage are presented in the third chapter, as well as information on immunizations and well child care. The special health concerns of children under age 5 are discussed including injury prevention, lead poisoning, child abuse, AIDS, mental health, chronic illness and early intervention programs.

The final chapter addresses the concerns of working parents such as flexible work arrangements and child care. While not strictly health concerns, these issues certainly impact the overall productivity and motivation of the workforce.

A list of resources for companies interested in additional information is provided in Appendix A. The agenda for the November, 1989 meeting and list of participants is also included in Appendix B.

CHAPTER ONE

THE DEMOGRAPHICS OF MATERNAL & CHILD HEALTH

Women in the Workforce

One of the most important demographic trends confronting corporate America today, is the increasing number of women in the labor force. Not only are there more working women, but studies indicate that women are delaying their first pregnancies; having more children while working; working to within one week of delivery and returning to work within weeks after delivery.

The number of women working has been increasing since World War II. In 1948 the rate of women over age 16 participating in the labor force was 32.7 percent. In 1988, this participation rate had increased to 56.6 percent.[2] Women will also be the major source of new entrants into the future labor force. Experts predict women will account for 63 percent of the net labor force growth by the year 2000.[3]

The increase in women's employment is especially large among women 25 to 54 years, with job growth experienced by black, Hispanic and white women. However, recent labor statistics indicate that there were fewer employed women 20 to 24 years old, reflecting the steep drop of the birth rate beginning in the mid-1960s.[4]

Women's employment opportunities increased across a broad range of job categories during 1988. Overall, women continued their occupational upgrading, with job gains particularly noted in managerial and professional specialty occupations. These two groups, which make up only a quarter of women's total employment, accounted for 60 percent of the job growth in 1988.[5]

Women Working and Pregnancy

Before the 1970s, the peak years for women to work were from the age of 20 to 24 and 45 to 54. In the mid-1960s, 50 percent of women in those age groups were working. Births and child rearing kept the majority from employment.[6]

In 1989, more than 34 million women ages 20 to 44 hold jobs,[7] and experts estimate that 80 percent of them will become pregnant during their work lives.[8] The employment rate exceeds 70 percent for women in every five year childbearing age group from 20 to 44.[9]

Women today are starting families at later ages than a generation ago. First births to women in their thirties quadrupled between 1970 and 1986, with the most dramatic increase among women

between the ages of 35 and 39.[10] Many of these women are in hard-to-replace professional and managerial positions by the time they have their first child. However, as pointed out by Felice Schwartz, founding president of Catalyst, an automatic association of all women with babies is clearly unjustified. In a recent article, she noted that while 90 percent of executive men have children by age 40, only 35 percent of women executives do so.[11]

In addition, many more women are continuing to work during pregnancy, closer to delivery, and returning to work within several weeks after giving birth. It was uncommon until after World War II for women to work during pregnancy. In 1963, 58 percent of married women who had a first child that year worked to some extent during pregnancy. A 1973 study found a slight rise, to 61 percent. The rate soared to 79 percent in 1980.[12]

At one time, women were advised not to work beyond the sixth month of pregnancy. In 1973, the median was 6.9 months.[13] By 1980, 41 percent of pregnant white-collar women were working at the start of the ninth month of their pregnancy.[14] Today working up to the week before delivery is common.

Today, fewer women are leaving the workforce after having a baby. In 1985, of all women with infants one year or under, close to 50 percent were working, up from 39 percent in 1980.[15]

> "I think we've come a long way in that I think more and more companies are recognizing that working women are, and will continue to be, a very important segment of the work force. As the labor market shrinks and as we need to be able to compete in a worldwide economy, we're going to have to take care of the work force that we've got and the future work force. We have a long way to go."
>
> **Irene McKirgan**
> **Director of Health Promotion Programs**
> **The March of Dimes Birth Defects Foundation**

OTHER SOCIETAL TRENDS AFFECTING MATERNAL AND CHILD HEALTH

Changing Family Demographics

Today's typical American family varies significantly from the neat familial package of the fifties where the wife remained at home and the father was the sole wage earner. Families today are often headed by a single parent -- usually a working woman. In 1988 24.3 percent of all households with children under age 18 lived with one parent only, an increase of 12.4 percent since 1970.[16] Nearly half of the mothers of preschool children (under 6 years of age) were in the labor force in 1985, an increase of 75 percent since 1970.[17]

The reality of the 1980s is that most children are reared in households where the parents work outside the home -- a fact that is expected to continue in the 1990s. In 1985, approximately 30.6 million children under 18 years of age lived either in households with a single parent who worked outside the home or in two-parent households in which the mother was employed outside the home. Out of that total group of children with working parents, 8.7 million were under 6 years of age.[18]

As traditional societal roles for men and women dissolve and boundaries between family life and life at the worksite become less defined, it is apparent that maternal, child health, and child care issues will continue to be of mounting concern to employers.

National Infant Mortality Rates

Perhaps the single greatest indicator of a community's overall health is its infant mortality rate, measured by the number of infants who die before the age of one per 1,000 live births. In 1985, the infant mortality rate for the United States was 10.6, placing it twenty second among nations worldwide. The United States lagged behind such nations as Ireland, Japan, France and Canada.[19] The infant mortality rate for black infants remains almost twice as high as that for white infants.[20]

Infant mortality also varies widely among states -- with the best rates found in 1987 in Massachusetts, New Hampshire, New Mexico, Maine and Rhode Island and the worst rates in the District of Columbia, Mississippi, Georgia, South Carolina and Alabama.[21]

The slowed rate of improvement in our nation's rate of infant mortality is of vital concern to employers. For every infant who dies, many more are left with handicapping conditions requiring expensive intensive care and re-hospitalization at an average cost of $54,800 per child. The price tag of a lifetime of expensive care and treatment for these children can average $389,800.[22] A corporate meeting participant shared what the impact of low birthweight babies had been on her company:

> "In 1988, we had a thousand births in our group; 1.4 percent of them were extremely neonate and that ate up 28 percent of our new born dollars while 85 percent of our births were totally normal they accounted for 27 percent of our new born dollars."
>
> **Liz Cronin**
> **Manager, Health and Welfare**
> **Levi Strauss**

Infant mortality is often tied to lifestyle factors. Poor nutrition, smoking, alcohol and drug use - all increase women's risk of delivering low-birth weight babies. The devastating statistics associated with smoking were particularly noted during the meeting:

"It has been estimated that smoking accounts for nearly 25 percent of all low birth weight in the United States; and 10 percent of U.S. infant mortality."

Dr. Woodie Kessel
Director
Division of Maternal and Child Health (DMCH)
Program Coordination and Systems
Development, DMCH

The high rate of infant mortality in the United States is directly related to the high rate of low-birth weight babies. Low birth weight contributes to two-thirds of the deaths of babies in the first month of life. Between 1985 and 1986 there was no improvement in the proportion of infants born at low birth weight. Among black and nonwhite infants, the incidence of low birth weight actually increased. As a result, the black-white low-birth weight gap in 1986 was the second highest ever recorded since data for blacks were first reported separately in 1969.[23] Dr. Kessel summarized the disparity in these statistics:

"One way of looking at the black/white disparity in this country is that blacks have achieved a rate of infant mortality roughly the same as whites achieved some 25 years ago, essentially suggesting it's a whole generation of difference. While the numbers clearly indicate a quantitative disparity, it may be more important to understand that there's a generational consequence of not correcting the problem."

Dr. Woodie Kessel
Director
DMCH Program Coordination and System (DMCH)
Development, DMCH

Dr. Audrey Manley, Deputy Assistant Secretary for the Public Health Service told meeting participants about the importance of the issue within her department:

"Within the Department of Health and Human Services, Secretary Sullivan has identified improving access to quality health care for low-income and minority pregnant women and infants as a Department initiative. The initiative is based upon the following principles, that access to and utilization of the full range of pregnancy and infant health services are essential if infant mortality rates in the country are to be lowered. Further reduction of infant mortality rates will require that we have a combined effort of the public and private sector. And it involves activity at the national, state and local levels. It requires that pregnant women seek early prenatal care, that they obtain good nutrition, that they alter their behaviors, such as smoking, drug abuse, alcohol. And it is also based upon the principle that we must target our limited resources to the areas of greatest need."

Dr. Audrey Manley
Deputy Assistant Secretary for Health
U.S. Public Health Service

Teenage Pregnancies

One out of every 10 women aged 15-19 in the United States becomes pregnant each year, a proportion that has changed little during the past 15 years. In 1988, an estimated 837,000 women aged 15-19 became pregnant. Of these pregnancies, five out of every six were unintended.[24]

Compared with rates in other developed countries, teenage pregnancy, birth and abortion rates in the United States are among the highest in the world. In 1980, only in the Eastern European countries of Bulgaria, Czechoslovakia, East Germany, Hungary and Romania were birthrates among women age 15-19 equal to or higher than the United States.[25]

Teenage birth rates also vary substantially by state, with the highest birthrate for adolescents 15-19 found in Mississippi and the lowest found in Minnesota in 1985. Birthrates are generally high in the southern states stretching from Georgia through Texas, New Mexico and Arizona. Besides Minnesota, the states with the lowest birthrates are Massachusetts, New Hampshire, Connecticut and Iowa.[26]

Unintended pregnancy is an especially costly burden for the nation's public welfare system as many unmarried teenaged mothers become dependent upon some form of public assistance. Young mothers are also often forced to quit school before obtaining their high school diploma, making it difficult for them to find employment. With large economic and social barriers facing these young and poorly prepared mothers, it is no surprise that their children also suffer a poor start in life creating even more gaps in the already limited future workforce.

Teenage pregnancy rates also affect employers by increasing their health care benefit costs when the young mother is a dependent of an employee covered by the group health plan. The consequences of a teenager not having access to employer coverage can be equally costly to society as teenagers may need to move away from their family in order to qualify for Medicaid.

Proactive employers already realize that promoting healthy mothers and infants and addressing problems such as infant mortality and teenage pregnancy make sound business sense as the demographic and societal trends indicate that the workforce of the future will vastly differ from its current makeup. As one corporate participant noted:

> "I think you are quite right that there is a mixture of reasons why corporate America is involved in these issues. One is altruistic, to some extent; the other one, bottom line. From my point of view, you choose children over the other priorities because that's your future, that's your future working force."
>
> Richard Green
> Director, Honeywell Community Programs
> Honeywell

CHAPTER TWO

MATERNITY CARE - AN OVERVIEW

Health Care Costs of Maternity Care

In 1987, the United States spent $500 billion dollars on health care, or over 11 percent of it gross national product. By the year 2000, it is estimated that health care expenditures will rise to 15 percent of the GNP, the highest for any developed country.[27]

The private sector -- either patients themselves or private health insurers -- paid approximately 60 percent of the total health care bill.[28] For employers, rising health care costs translate directly into increased benefits costs. According to a survey by the U.S. Chamber of Commerce, costs for all employee benefits in 1987 climbed 4.1 percent to an average of $10,700 per employee from $10,283 per employee in 1986. Medically related benefits among surveyed firms averaged $2,820 for salaried workers and $3,059 for hourly paid workers.[29]

The Bureau of National Affairs reports that for most employers, expenses related to childbirth are the largest single component of health care costs.[30] The Health Insurance Association of America has reported that maternity benefits cost 10 percent of the total medical benefits paid under a commercial plan. One benefits consulting company, however, reports employers' costs related to maternity care range from 10 percent to 49 percent.[31]

In 1985, women having babies represented 27 percent of the total number of patients age 15-44 hospitalized. The number of women admitted to hospitals to have a baby or for another reproduction related reason (4.9 million) exceeded the total number of men admitted for any reason. Women admitted for delivery accounted for 39 percent of the hospital patients in their early 20s, 33 percent of women patients aged 25-34, 28 percent of teenage patients, and 6 percent of women patients aged 35-44.[32]

According to the Alan Guttmacher Institute, the U.S. spent about $16 billion in 1985 on maternity care. Of this, an estimated $4.7 billion was spent for physician care and laboratory procedures and $11.3 billion was expended for hospital charges.[33]

For a normal delivery in a hospital delivery room, the total cost (hospital stay and physician services) averaged $4,334 in January 1989 according to a survey conducted by the Health Insurance Association of America.[34] This compares to a $2,047 average in the January 1982 survey conducted by HIAA. The survey

also found that the average length of stay for an uncomplicated delivery varied across the country.[35]

C-Sections

While most births occur by normal delivery, there has been an increase in Cesarean deliveries (C-Sections) over the past two decades. Cesarean deliveries rose from 4.5 percent of all births in 1965 to 25 percent in 1987.[36] The average cost of an uncomplicated cesarean delivery in the U.S. was $7,186 in 1989.[37]

The reasons for the high rate of C-sections are complex. Medical experts point to the continued use by obstetricians of a policy of automatic repeat Cesareans for women who have delivered once this way, despite recommendations by the American College of Obstetricians and Gynecologists that many women can successfully deliver vaginally after having had a C-section.[38]

According to the Public Citizen Health Research Group, 50.8 percent of the 934,000 C-sections done in the U.S. in 1987 were unnecessary. Unnecessary C-sections caused approximately 25,000 serious infections, an extra 1.1 million days in the hospital and cost over $1 billion.[39]

Recent research has linked the rate of C-sections to income. Women who lived in census tracts with a median family income over $30,000 in 1982 and 1983 had a C-section rate of 22.9 percent, as compared with 13.2 percent among women residing in areas with a median family income under $11,000. The research controlled for various factors including maternal age, birth weight, race, ethnic group or complications of pregnancy or child birth.[40]

Some local health care coalitions have conducted studies to determine the extent of C-sections among their member companies. The Southeast Louisiana Health Cost Management Coalition in New Orleans found that the C-section rate for 656 deliveries among member employer groups was 34.8 percent compared to a national rate of 21.1 percent in 1984. The Greater Detroit Area Health Council found that the number of total deliveries between 1983 and 1987 increased by 10.3 percent while the number of C-sections increased by 26.5 percent for that period. The coalition is starting a dialogue with area hospitals in order to generate ideas for an intervention project. The Houston Area Health Care Coalition has developed an informational pamphlet, A Guide to Maternity Care - A Matter of Choice. The pamphlet contains sections on Cesarean birth, vaginal birth after Cesarean and repeat Cesarean birth.

Health Insurance Coverage of Maternity Care

Most couples are at least partially insured for the expenses of having a baby. According to a 1987 report by the Alan

Guttmacher Institute, 73 percent of the 56 million U.S. women of reproductive age (41 million) have some form of private health coverage. Sixty-seven percent (38 million) are covered by group insurance that is generally obtained by their own, their spouse's or their parent's employer, six percent (three million) buy their health insurance themselves, and 10 percent receive coverage through public programs.[41]

Fourteen percent of participants in employment-related plans (a total of 5.3 million women) are covered through health maintenance organizations (HMOs) or preferred provider organizations (PPOs). More than four in 10 workers insured through medium-sized and large companies are enrolled in company self-insured plans.[42]

While the majority of women do have some type of health insurance coverage for maternity care, a significant number have no public or private insurance, or are in plans that do not cover maternity care. According to the Alan Guttmacher Institute, in 1985, 9.5 million women ages fifteen to forty-four had no health insurance. This represented 17 percent of the women in that age group. In addition, the Institute estimates that approximately five million women ages 15-44 had health insurance policies that did not cover maternity care. Therefore 14.5 million women of child bearing age, or 26 percent of the population, had no health insurance coverage for maternity care in 1985.[43]

Waiting periods for coverage or for preexisting health conditions affect 58 percent of full-time employees participating in employment-related health insurance programs, including 20 million women of reproductive age. More than half of these are in plans that impose a waiting period of three months or longer.[44]

Most health insurance policies do not pay the full medical bill, and half do not cover routine medical care for the baby in the hospital. The Guttmacher Institute reports that only 7 to 8 percent of participants in group plans are fully covered for hospital room and board and other charges, such as anesthesia. Only 26 percent are fully insured for physician charges for maternity care. Coverage for physician fees for maternity care rises with the size of the employing firm. Thus, only 19 percent of people insured through companies that employ fewer than 250 workers have full coverage for their medical bills, compared with 29 percent of those insured through firms with 1,000 or more employees.[45]

A report from the Children's Defense Fund notes the linkage between private insurance coverage and access to maternal health care. In 1980, 28.8 percent of privately insured women ages nineteen to forty-four obtained reproductive care from obstetricians-gynecologists, compared with 18.9 percent of women with no insurance. In 1982, 18.2 percent of uninsured white women

and 24.0 percent of uninsured black women received prenatal care later in their pregnancy, compared with 5.8 percent of white women and 8.2 percent of black women with private insurance.[46]

CORPORATE MATERNITY BENEFITS

Introduction

While corporate maternity policies are for the most part affected by company size, in general, employers offer the following to pregnant workers:

- o health insurance covering hospitalization and physician care continued during a leave of absence;
- o full or partial wage replacement, usually in the form of a short-term disability policy to cover all or a varying portion of the maternity leave;
- o job-protected leave for a specified time with guaranteed retention of seniority, pension rights and other benefit entitlements.

Employer maternal initiatives have also included a combination of developing worksite prenatal education programs, pregnancy case management, and altering the work environment to accommodate pregnant employees. These programs address a range of health issues from pregnancy to coping with the stress of child care, from being a working parent to having healthy children.

Maternal Disability and Parental Leave Policies

The 1978 Pregnancy Discrimination Act requires employers that offer medical disability coverage to their employees to treat pregnancy related disabilities in the same manner as all other disabilities. While pregnancies must receive equal treatment under the law, there is no national mandate that employers must offer short-term disability. In 1979, the Supreme Court affirmed that pregnancy disability must be treated like any other disability in terms of benefits, time off from work and other considerations.

Maternity coverage for a dependent of an employee, such as a teenage daughter, is not required under the law, nor is maternity coverage required in policies of firms with 15 or fewer employees or in non-employment related insurance. Maternal and child health advocates argue that the gaps in maternity coverage under the Act are serious, with 35 percent of typical family insurance policies excluding non spouse dependents and 69 percent of policies excluding the babies of nonspouse dependents.[47]

In 1988, income protection against short-term disabilities was available to 89 percent of workers, through sick leave, sickness and accident insurance, or both. Sick leave plans, covering 69 percent of employees, most commonly specified a maximum number of benefit days per year at full pay; most of the remainder specified the number of sick leave days for each disability. The number of days available varied greatly among these types of plans; for workers with one year of service, for example, annual plans averaged 13.2 days and per disability plans averaged 52.9 days. Sickness and accident insurance plans, covering 46 percent of the employees, pay a portion of an employee's regular earnings, usually for a maximum of 26 weeks.[48]

The Wyatt Company, in a 1986 survey of 1,418 employers, found that 60 percent of employers offered either an insured short term disability plan, or a self-insured short term disability plan beyond sick leave. Eighty-six percent of the plans had no employee contribution and 54 percent paid benefits for 6 months.[49]

In 1988, the Bureau of Labor Statistics annual employee benefits survey studied parental leave provisions in the private sector for the first time. These plans are provided to new mothers or fathers to care for their children during the early days of infancy and are separate from other leave plans, such as short-term disability coverage. The survey found that unpaid maternity leave was available under plans covering 33 percent of the employees and unpaid paternity leave under plans for 16 percent of the employees. Both maternity and paternity benefits averaged four months in duration. Paid maternity and paternity leave provisions were rare.[50]

Currently five states -- California, New York, New Jersey, Rhode Island and Hawaii -- require disability insurance for all employees, thereby entitling mothers to paid maternity disability leave. In 13 states (California, Colorado, Connecticut, Hawaii, Illinois, Iowa, Kansas, Massachusetts, Montana, New Hampshire, Oregon, Tennessee, and Washington) employers must hold jobs for women after childbirth.[51]

Several studies have found that paid or unpaid maternity leave is more likely to be offered by medium or large employers. A survey of 384 of the largest U.S. corporations by the Catalyst Career and Family Center found that 95 percent of the companies offered disability leave for pregnancy, which included time off with some pay. Fifty-two percent of the companies offered unpaid maternity leave on top of the disability leave, and 37 percent offered unpaid paternity leave.[52]

Although the conventional maternity leave is generally eight weeks, the length of time off following delivery is an area of controversy. Many women, concerned about losing time from their jobs even with a paid leave, return several weeks after delivery.

This usually hinges on the availability of suitable child care arrangements.

At a recent national conference on worksite disability management, Marilyn Jerome, M.D., an obstetrician specializing in pregnancy disability, stated that a normal, healthy woman can usually work up until the time of labor, and can return to work approximately six weeks after delivery. However, a woman who is at high-risk for premature delivery is not advised to work during the latter portion of her pregnancy and would require job restrictions or modifications to continue working safely.[53]

Jerome also noted that returning to work six weeks after delivery with a young infant at home is extremely tiring. Women may feel guilty about returning to work and leaving their newborn at home, and still other women may experience postpartum depression. All of these factors may affect their ability to cope with their jobs and all point toward the need for employers to develop flexible maternity leave policies covering pregnancy and birth. She suggests a policy mix of paid and unpaid leave with the understanding that the employee will be reinstated in the same, or equivalent, job upon return.[54]

Some employers develop formal written maternity policies, assuring that employees cannot be offered less than the stated policy. However, employers not constrained by formal policies, can provide benefits on a case-by-case basis and can, for example, offer favorable terms to reward a valued employee. Though these policies offer increased flexibility, the absence of standardized procedures introduces problems of equity and discrimination.[55]

Finally, some companies allow employees to use their sick leave to care for ill children or for other reasons such as children's medical appointments or teacher conferences. In a 1986 national study by Catalyst it was revealed that thirty-six percent of the responding companies permit employees to count care for babies as sick leave.[56] Employer policies in this area vary, from instituting an hourly leave (vs. full day leave) policy, to allowing employee's personal leave that can be used for their own illness, their child's illness or other reasons. As noted by one corporate participant:

> "We're starting to take our personal days and make them available in two-hour or 1/2 day increments. We just bargained that in our last bargaining. That's responsive to people who need to take a sick child to the doctor or have other family business."
>
> **Ellen Friedman**
> **Manager, Benefit Planning**
> **Ameritech**

American maternal health benefits and practices are in marked contrast to European laws and regulations affecting maternity. A 1984 World Health Organization (WHO) study of 23 countries of the

European Region found that all surveyed countries have a combined prenatal and postnatal maternity leave of at least 12 weeks.[57] In addition to continued receipt of a job salary, or part of a salary, while on maternity leave, mothers in nearly all European countries receive other special benefits such as grants for each child born, family allowances or other social benefits.[58]

Prenatal Care

"Healthy mothers have healthy babies, it's that simple."
Dr. Woodie Kessel
Director
DMCH Program Coordination and
Systems Development, DMCH

One of the most accepted measures against low birth weight and infant mortality is early prenatal care, especially for women at increased medical or social risk. The three basic components of prenatal care are 1) early and continuing risk assessment including a complete history, physical examination, laboratory tests, and assessment of fetal growth and well-being; 2) health promotion consisting of counseling to promote and support healthful behaviors, general knowledge of pregnancy and parenting, and information on proposed care; and 3) medical and psycho-social interventions and follow-up including treatment of existing illness, modifications of behavior, provision of social and financial resources, and referral to and consultation with other specialized providers.[59]

Prenatal care is cost-effective. The National Commission to Prevent Infant Mortality estimates the lifetime costs of caring for a low-birth weight infant can reach $400,000 while prenatal care can be as little as $400.[60] The Commission also projects that for each low birth weight birth which could be averted, the U.S. health care system could save between $14,000 and $30,000. In 1985 the Institute of Medicine calculated that each dollar spent on prenatal care for low-income, poorly educated women could save $3.38 in direct medical expenses.[61]

However, because of financial, cultural, personal and other barriers, many women do not receive necessary prenatal care. In 1986, a smaller percentage of mothers received early prenatal care than in 1980, while during the 1970s the rate improved continuously.[62]

The Institute of Medicine reports that financial barriers, particularly inadequate or no insurance and limited personal funds, were the most important obstacles reported in 15 studies of women who received insufficient prenatal care. In six of their studies of women who received no prenatal care, financial barriers were again cited as the most common obstacle.[63]

Recent research conducted in California indicates the importance of prenatal care in contributing to healthy newborns. The study was based on a review of records of more than 146,000 births in 1982, 1984 and 1986. During this time, the number of newborns without health insurance increased by 45 percent. By 1986, the chance of an "adverse hospital outcome" (defined as a prolonged hospital stay, transfer of the newborn to another institution, or death) was 31 percent greater among uninsured newborns as compared to insured newborns. Black and Latino uninsured newborns were particularly subject to adverse hospital outcomes.[64]

The most effective way to reduce maternity costs is to reach the employee or dependent either before conception or early in the pregnancy. One study by the Children's Research Institute of California issued in 1987 showed that babies of mothers receiving adequate prenatal care are five times more likely to live and one-and-a-half times more likely to be born at adequate birth weight than babies whose mothers received no prenatal care.[65]

The efficiency of prenatal health care to improve pregnancy outcomes carries significant implications and challenges for public and private sector policy. The serious and long term effects of inadequate prenatal care affect all sectors of our society, and likewise, the responsibility of addressing barriers to prenatal care falls upon the shoulders of both the public and private sector.

CORPORATE PROGRAMS

Worksite Prenatal Education

Prenatal care and education are perhaps the most effective tools available for employers to help promote healthy mothers and infants and thereby curb the growth of maternity-related care expenses. Savings in health insurance costs, improved productivity, fewer absences during pregnancy, earlier return to work following childbirth, and less employee turnover are among the benefits companies report from their worksite prenatal programs.[66]

Realizing the effectiveness of prenatal care, many employers are beginning to provide in-house prenatal education programs to promote healthy lifestyles and prompt pregnant women to take greater control of their pregnancy. By using the work setting as a support system, prenatal programs encourage pregnant employees to adopt healthy behaviors. Participants also become highly motivated and eager to learn what will help assure a healthy pregnancy, delivery, and baby. In addition, worksite prenatal education programs promote a partnership with the employee:

"It is our feeling that the consumer is part of the problem and that they have to be involved... Part of the partnership responsibility of the employee is to maintain their own good health to the extent they can."

Suzanne Mercure
Human Resources Compensation and Benefits
Bull HN Information Systems

Employers also profit from worksite prenatal education through improved productivity. Employees who learn how to deal with common symptoms, such as nausea and backache, can continue to effectively manage their pregnancy and work. Working women who learn how to cope with the stresses of pregnancy are also less likely to miss work days. Prenatal educational seminars and programs also contribute to employees returning to work earlier, resulting in less need for co-workers to share the workload during a prolonged absence, or to hire and train a replacement.

Companies which address maternal and child health care issues within the worksite do so in a variety of methods and forums. Using the communication channels already available to employees, an employer may choose to address prenatal issues through written media such as employee newsletters, fact sheets, pamphlets or brochures. Often in-house medical professionals present the material including information on the following subjects: genetics, alternative birth-site options, exercise, smoking, family planning, nutrition, alcohol and drugs, stress management, environmental and workplace influences on pregnancy, and seminars on child development and child rearing for parents. Also receiving an increasing amount of attention are programs which address employees' anxieties about contact with persons with AIDS. Prenatal programs can be an effective way for dispelling irrational fears or misconceptions employees may have about AIDS.

Corporate Prenatal Programs

For one company, the dividends of their prenatal program paid off very quickly. Oster/Sunbeam started a prenatal program, at an annual cost of $20,000, involving educational classes and monitoring of the pregnant women's blood pressure, weight and other physiological signs. The program is mandatory for all pregnant employees and open to spouses on a voluntary basis. The company saw its maternity costs at two plants dive from a per pregnancy average of $17,000 to just $3,500 after instituting the prenatal program.[67]

The Franklin Life Insurance Company in Springfield, Illinois has been conducting a prenatal education program since 1979. The program consists of three sessions on nutrition, growth and development of the fetus and what to expect when you go into labor.

In a review of the program after the first eighteen months, the company found that absences decreased an average of 4.5 days per pregnant employee. They also reported a reduction in average time off per employee. Since the beginning of its prenatal program in 1979, the average time off dropped from 15 weeks to nine weeks.[68]

A new trend in corporate programs is to offer financial incentives to pregnant employees who participate in company sponsored prenatal care programs. Marriott Corporation gives a $100 bonus to pregnant employees or their spouses who complete its Healthy Expectations program. The rationale for the program was expressed by its founder during the seminar:

> "Taking care of our employees is a key philosophy of Marriott. A healthy family life means a happy employee and a happy employee is a productive employee. That's the reason why the program is in effect... Last year, we had claims in excess of $416,000.00 for premature births. If we can eliminate one such premature birth the program will have paid for itself."
>
> **Mara Puri**
> **Health Benefits Department**
> **Marriott Corporation**

The Healthy Expectations program requires that participants visit their doctor before the end of their fourth month of pregnancy as well as three times in their second trimester and five times in their third trimester. In addition, a personal Healthy Expectations consultant calls each participant regularly to give information and answer questions. Once they have completed an evaluation form for the program, the employee receives $100. Approximately 1,000 women have participated in the program since its inception and the outcomes have been impressive. Ms. Puri indicated during the seminar that preliminary data show an 11.5 percent decrease in the number of premature births and a 16 percent decrease in claims paid for premature births during the life of the program.

The General Electric Lighting Division in Cleveland, Ohio began a voluntary prenatal prevention program in May 1989 which involves at least monthly phone consultations with pregnant employees. The program is particularly geared to identifying and counseling high risk mothers (who may receive additional phone consultations) and in giving information about C-sections both to first time mothers and those who have had one previous C-section. Upon successful completion of the program, the employee can receive $125. The GE program manager addressed the particular outreach made to the physician community to make them aware and supportive of the GE program:

"First of all, we tried to position this by getting some endorsement from reputable organizations including the State of Ohio Department of Health. We also contacted one of the key medical institutions in Cleveland that does a lot with high-risk neonate care and they gave us a written endorsement which we use in our communication. We also tested some of the physicians in the community. Many thought that we were taking business away from them; others supported the program. We actually wrote a letter to every physician in Cleveland that was an OB/GYN physician, explaining the program and trying to communicate as best we could, indicating that we were going to do the program, and we'd like their support."

Charlie Newman
Program Manager, Health Care Management
GE Power Generation Division

Corporate meeting attendees were particularly sensitive to the equity issues inherent in designing a program that targets only a portion of the workforce. A corporate representative described the problem in her company and then how it was solved:

"People say, 'Why are you spending this money just for this small group of people? We only have 1,800 pregnancies out of 53,000 people covered under this one plan and why are you doing this for them?' So people do say that you're taking a dollar they could use and giving it to someone else. It is an issue that should be faced... What was key for our program was the support from the chairman. He just nodded and said, 'This is the right thing to do.' And so, of course, we have the figures to back up why we wanted to do it and what results we wanted. But I think having senior management support is critical."

Kathi Child
Manager, Benefits Development
J.C. Penney

These programs are not isolated examples of the cost-effectiveness of worksite prenatal programs. Other companies such as those at Burlington Industries, First National Bank of Chicago, Pepsico, Georgia Pacific, First Bank System of Minnesota and Ameritrust have implemented successful prenatal programs. Companies across the nation are reaping the benefits of such worksite initiatives. They are realizing the value of addressing the educational needs of not only those employees who are already pregnant, but all potential mothers and fathers. Prospective parents can also learn much in prenatal seminars about the stresses that may be experienced by both parents. Co-workers of pregnant employees can be encouraged to attend so they can lend support, and supervisors also can get a contemporary perspective on pregnancy and work performance from worksite prenatal education.

While the activities of major companies is encouraging, seminar participants were concerned that more could be done:

"I suspect that, although there has been no study done, the number of companies that offer prenatal education is probably much lower. I don't really see prenatal health as a critical component of work site health promotion today. I think it's been left out. It's left out of the literature... Some of the big companies are doing a great job, but they have the resources to do that, whether it's financial or human. I don't think that we're making that same kind of impact in the small businesses."

Irene McKirgan
Director, Health Promotion Programs
The March of Dimes Birth Defects Foundation

In addition to small business the public sector employer could also be a target for worksite prenatal programs. The magnitude of the public sector was noted by one meeting attendee:

The federal government employs about two and a half million employees. When you look at public employment as you go down through state and county and municipal levels, you're talking about, if I remember the statistics, 20 million employees in the United States that are working at some level of public service."

Frank Gavin
Assistant Director of Personnel
Office of Personnel Management

Other Cost Management Efforts Targeting Maternity Care

In addition to recognizing the value of prenatal education as a cost management strategy, companies are exploring other avenues for keeping maternity costs down and increasing employee productivity. Some employers promote the use of alternative free-standing or hospital-based birth centers as a means to control the costs of hospitalizations for low risk pregnancies. According to the Health Insurance Association of America, birth centers serve less than one-half of one percent of American women. The usual delivery in a birth center involves a stay of less than 24 hours and cost an average of $2,611 in 1989 including prenatal and neonatal care by a certified nurse-midwife, a physician or a combination of the two. Birth centers are not only less expensive but are also more personalized as they allow for spouse, and often sibling, participation in the birthing process.[69]

Certified nurse-midwives (registered nurses with advanced education in midwifery) most commonly practice in hospitals and birth centers. In addition, other nurse-midwives and lay mid-wives are licensed in a number of states to assist in deliveries. The cost of a licensed midwife's service was $1,060 in metropolitan areas and $915 in nonmetropolitan areas in 1989.[70]

Some companies are implementing short-stay maternity programs which give new mothers who have had normal deliveries an incentive to leave the hospital after two days rather than the traditional three days. The General Electric Division in Cleveland, Ohio

offers short stay mothers who voluntarily enter the program, the service of a maternity nurse for one visit and 8 hours of a homemaker service to assist the transition home. The company figures they save $500 on every mother who voluntarily participates.

Other services employers are providing include worksite accommodations for new mothers, such as rest areas for the working mother who is breast feeding. Employee Assistance Programs (EAPs) provide pregnant workers with support and help in solving problems that arise either at work or at home, both before and after child birth.

Employers are also using utilization review and/or case management companies to identify and monitor high risk pregnancies. Once identified, optimally by the early second trimester of the pregnancy, case managers can assist high risk employees to manage in their homes with the use of homemakers, assist in medication which prevents premature labor, and identify and monitor specialist care or therapies which may be necessary. If an extremely premature baby is born, professionals from the case management company can also assist in locating the appropriate level of hospital care, monitor the early bonding process of mother and child and arrange for home care when feasible.

Southland, a diversified retail and distribution company headquartered in Dallas with a workforce that is 50 percent female, is in the process of implementing a maternity program which involves coordination with their claims payer on the following components: 1) insuring that the pregnant employee (or spouse) has added dependent coverage prior to delivery; 2)identifying potential high risk mothers in order to link them with the services of their case management firm; and 3)providing pregnant women with information about a healthy pregnancy.

ALTERING THE WORK ENVIRONMENT

For employers, addressing the special needs of pregnant women may involve a variety of alternative work arrangements including making alterations in the workplace, itself. For example, if a female employee's job requires heavy lifting or other strenuous types of activities, it is likely that she may have to alter her job assignment for a period of time. Other environmental hazards such as exposure to heavy metals, radiation, anesthetic gases, and stress may require worksite alterations for pregnant employees.

Environmental Hazards

Substances which can cause abnormal fetal development are known as teratogens, and include physical, chemical, and biological agents. Only a few such substances have been confirmed as teratogens in humans.[71]

Little is understood about the mechanisms that produce toxic effects. One substance may cause a variety of effects, while a particular effect may be produced by a variety of causes. Consequently, the correlation of a given exposure with a fetal abnormality in a population does not necessarily prove a causal relationship in any individual case. The current lack of definitive knowledge makes it difficult for practitioners to provide meaningful advice when consulting patients concerned about environmental hazardous exposure.[72]

The American College of Obstetricians and Gynecologists (ACOG) reports that exposure of pregnant women to certain chemicals, metals, and other substances may cause abnormal fetal development resulting in possible miscarriages, defects present at birth, or problems that appear later in life. Exposure to heavy metal such as lead and mercury has been linked with miscarriage, still birth, mental retardation, and other birth defects.[73] Women working in industries involving lead smelting, battery and paint manufacturing, printing, pottery glazing, and ceramics are at higher risk of lead poisoning. Toll booth attendants and others who work on heavily travelled roads may also have high levels of lead in their blood. Dentists, lab workers, dental hygienists and technicians may inhale mercury while on the job.

Ionizing radiation can also cause harmful effects on fetal development. Exposure to high levels of X-rays is suspected of causing cancer, genetic damage, and miscarriages. Alterations in the work environment can be made, however, which reduce the risk of high level exposure. For example, X-ray technicians, can use shields for protection from frequent exposures to high levels of radiation. Also, women planning a pregnancy who are exposed to ionizing radiation in industrial and medical settings can monitor the amount of radiation to which they have been exposed.[74]

Women who are continually exposed to anesthetic gases while working in operating rooms and dentists' offices may also be at increased risk for miscarriage and birth defects. However, many hospital operating rooms protect pregnant employees by installing systems which remove anesthetic gases from the room.

One diversified chemical manufacturing company has instituted a program in some of its plants to address and allay concerns of women who have become pregnant and may be concerned about their work environment. The company urges employees to contact the medical clinics when they become pregnant. The employee's

workplace can then be evaluated and altered, if necessary, to insure safety for the pregnant employee. Company medical personnel also urge pregnant employees and their physicians to raise any concerns they have about working at the company while pregnant.

Stress and Pregnancy

While stress is an unavoidable part of daily living and causes certain physical changes including muscle tension, faster breathing, and increased blood pressure; chronic stress can lead to physical and emotional problems ranging from fatigue to heart disease. There is some evidence suggesting that excessive stress during pregnancy can contribute to premature labor. Studies also indicate that extreme psychological stress may play a role in low birth weight.[75] However, simple lifestyle changes and relaxation techniques can assist in keeping stress manageable.

While the work environment and relationships may contribute to increased levels of stress, it is also an environment in which employees may learn helpful coping techniques in dealing with stress through worksite health education programs. These programs can be geared toward workers in general or specifically for pregnant employees. Whatever the selected audience, the worksite provides a good environment for addressing the issues concerning stress, pregnancy and work.

Visual Display Terminals (VDTs)

Many VDT workers have complained of psychological stress. Others have reported eye strain, pain in the neck and back, dull headaches, blurred vision, dizziness and nausea, tension, and irritability. These discomforts can add to psychological stress; however, there has been little evidence that working on VDTs affect the outcome of pregnancy. A 1988 study by the Kaiser Permanente Program in Oakland, CA, found that women who used VDTs more than 20 hours a week in their first three months of pregnancy had an elevated risk of miscarriages compared to non-VDT users. The authors note that the kinds of jobs where VDTs are heavily used (i.e. clerical) might contribute to reproductive risk. Women who sit at a VDT for most of their working day are generally in a different work environment than women who have access to VDTs but use them only intermittently.[76]

Heavy Work

While many pregnant women can usually continue to perform accustomed physical activities, those tasks involving heavy lifting, climbing or carrying may cause discomfort in some. However, few jobs require sustained periods of strenuous activity,

and high-energy outputs are usually required for only brief periods. Often a pregnant worker may continue to perform physically demanding work by simply eliminating peak efforts and varying the rhythm of work-rest cycles. However, if nausea, dizziness, or fatigue occur while engaged in physical activity, the risk of injuries increases."

As women increasingly enter jobs that were traditionally male dominated such as police, fire, and construction work, telephone line and forklift operation, etc., the demands of the position in terms of physical stamina and stress factors must be considered. Further alterations or arrangements may be required in these special situations for pregnant women.

CHAPTER THREE

CHILD HEALTH ISSUES

Introduction

Children under age five represent society's most vulnerable citizens. The early years of life are crucial for all aspects of human development and also represent a period when children are completely dependent on others for care and nurturing.

The overview of statistics about children's health presented in this chapter indicates that young children are generally healthy. However, a significant minority of children experience troubling early years - particularly those who are uninsured, low income, suffering from a chronic disease or subject to child abuse.

Employers have traditionally had little interaction with the nation's very young children. Increasingly, as will be discussed in Chapter 4, child care issues have made the nation's children visible to employers of all sizes. The costs of dependent care or family coverage in employer's health insurance plans has also become an increasingly visible issue, though many employers still don't know much about the dependents they cover. Large employers have also become more actively involved in promoting the educational health of children in school systems nationwide. Few however, have examined their potential roles in insuring healthy children prior to school entry. The importance of doing so was underscored by Dr. David Heppel from the Office of Maternal and Child Health:

> "Kids are a form of capital and the supply of qualified young workers is tightening. The work force of the future is going to be made up of the children today, one in five of whom is poor. One-third of the new entrants into the work force between now and the turn of the century will be minorities. Almost half of all black children and 40 percent of latino children are at or below the poverty level. Children in poverty tend to do less well in school and become less competent workers. Children must have a good start, good prenatal care. But a good beginning is not enough; this is a long-term investment."
>
> **Dr. David Heppel**
> **Director**
> **Division of Maternal, Child and Infant Health, OMCH**

The Office of Technology Assessment (OTA) in their assessment of the nation's children concluded:

> "First, the evidence suggests that the United States is not doing as well as it could in preventing health problems in children, despite the improvements to date.

"Second, prevention or treatment of health care problems in early childhood can benefit a child for a lifetime, and, conversely, failure to prevent such problems can be costly to the child, the child's family, and the Nation.

"Finally, the burdens of illness, disability, and death are not borne evenly. Some American children are at particularly high risk for poor health, and many of them have only limited access to medical services."[78]

Demographics/Health Status of Children

In 1985, there were approximately 18 million children under the age of five years. This represented 8 percent of the total population, a number that is expected to decrease slightly to 7 percent by the year 2000.[79] Children under the age of five are generally healthy, with 53.8 percent reported in excellent health in 1986.[80]

Differences in perceived health status, however, are related to income and race, with 55.9 percent of white children reported in excellent health and 42.4 percent of black children reported in excellent health. The difference in income levels is even more dramatic - with 63.9 percent of children under five in households with more than $35,000 reported in excellent health compared to 40.9 percent in households with less than $10,000.[81]

Children report more acute conditions than persons of any other age group. The 1986 National Health Interview Survey reported four acute conditions per child/per year for children under five. This compared to one condition per person/per year for those age 65 and over.[82] Respiratory conditions were the most common acute conditions cited for children.[83] Between 10-15 percent of all children have a chronic condition - most of which are mild such as allergies, skin problems and minor respiratory diseases.[84] Children under age five have 4.9 bed days per year and 10.8 restricted days per year due to acute or chronic conditions.[85]

In 1985, 5 percent of all deaths occurred among the under age 25 population. The leading causes of death among children under one year of age were conditions originating in the perinatal period, congenital anomalies, and diseases of the heart. Among the one to four age group, the major causes were injuries, congenital anomalies and malignant neoplasms.[86]

Health Care Utilization of Children Under Age Five

Children under age five averaged 6.7 physician contacts per year in 1987.[87] Surveys that same year found that nearly 10 percent

of white and 15 percent of black children ages 1-4 had not been seen by a physician in the previous year.[88] In 1980, 75 percent of physician visits for children under age five were for diagnosis/treatment, 15 percent were for checkups, 8.1 percent were for immunizations and .2 percent were for other reasons.[89]

In 1987, 6.3 percent of the population under age five had one or more hospital episodes with an average length of stay of 7.6 days.[90] According to data from 1983, respiratory disease accounted for much of the reason for hospital stays, followed by diseases of the nervous system and sense organs, digestive diseases and injuries and poisoning.[91]

In a study of nine Blue Cross and Blue Shield plans from around the country, the Actuarial Research Corporation found that the weighted mean fee for pediatric visits was $44 in 1988. This compares to the mean charge of $27 for pediatricians found in the AMA Survey of Socioeconomic Characteristics of Medical Practice and a median charge of $36 for pediatricians in a 1988 Medical Economics survey.[92] The American Academy of Pediatrics estimated in 1988 that child health expenses approximate $500 per capita per year for children under age 17.[93]

Well Child Care/Immunizations

"Companies have started by providing prenatal care. But now they must move to be sure that they don't just get the healthy baby and then say good luck. They need to follow through with well child care."

Lori Cooper
Executive Director
Healthy Mother, Healthy Babies

Well-child care involves a variety of preventive health services given by physicians or other health professionals throughout a child's life, beginning soon after birth and extending into adulthood. The goal of well child care is to improve the physical, cognitive, and psycho-social health of children. Well child care includes two types of prevention: immunizations and health supervision, consisting of physical examinations and other tests that screen for illness or developmental problems, health education, and parental guidance.[94]

Children today are generally vaccinated against eight diseases: diphtheria, tetanus, pertussis(whooping cough), polio, measles, mumps, rubella(German measles) and most recently, Hemophilus influenza b (Hib).[95] Immunizations are required by states for school attendance. In its review of child health, the Office of Technology Assessment (OTA) concluded, "the cost effectiveness of the childhood vaccines is well established in the literature -indeed, such vaccines not only confer medical benefits but are cost-saving."[96] The House Select Committee on Children,

Youth and Families reported the benefit-cost ratio for the measles, mumps and rubella immunization program as approximately 14:1.[97] The Committee also cites a CDC study which indicated that the $180 million spent on a measles vaccination program saved $1.3 billion in medical and long-term care by reducing hearing impairment, retardation and other problems.[98]

Concerns in the 70's and 80's with vaccine related reactions in children led to a liability crisis and a decrease in the number of vaccine manufacturers. This, in turn has led to higher vaccine costs which may, according to the OTA, affect whether childhood immunizations continue to be cost-saving.[99] Research compiled by the American Academy of Pediatrics (AAP) indicates the steep rise in costs for fully immunizing a child. In 1982, the private sector cost for complete immunization was $23.29. This cost had risen to $117.06 by 1988.[100]

Immunization rates in the United States have been declining. In 1980, slightly over 22 percent of children aged one to four years were not fully immunized against polio or rubella. In 1985, slightly over 24 percent of the same age group had not been immunized against either disease. While reported cases of measles and mumps have declined since 1980, the number of reported pertussis cases has increased 3-fold - from 1,730 in 1980 to 3,589 in 1985.[101]

While the AAP immunization schedule of seven well-child care visits for normal infants and children in the first 6 years of life has been found to be cost effective, the overall well-child schedule recommended by AAP calls for 13 visits in the first 6 years of life. The additional visits include such health supervision procedures as measurements, sensory screenings, developmental/behavioral assessments, and physical examinations.[102] The OTA report Healthy Children concluded that researchers have yet to document the effectiveness of the health supervision aspects of well-child care in terms of improved health outcomes.[103] Pediatric providers argue, however, that there are positive benefits for children resulting from health supervision procedures, but documentation of these benefits needs to be developed:

> "I think the question about routine health supervision visits beyond the very clearly demonstrated cost benefits of immunizations is problematic. The Academy of Pediatrics is intensively looking at what might be available in the literature to help document that."
>
> Dr. Antoinette Eaton
> Vice President
> American Academy of Pediatrics

Health Insurance Coverage of Children

Between 1979 and 1986, the percent of the population under age 65 who were uninsured increased from 14.6 percent to 17.5 percent.[104] The most dramatic trend related to insurance coverage during this period is the decline in the percent of the population covered by employment based plans through a family member. The percent of the population receiving coverage through another family member's employment based health insurance dropped from 34.3 percent in 1979 to 31.4 percent in 1986.[105] While some of this change is due to population shifts related to children under age 18, another significant percentage is associated with a decrease in coverage rates for children under age 18.[106] The Congressional Research Service reports that there is no clear explanation for this decrease but postulates the movement away from employer-provided noncash benefits and the increase in the required employee share of premiums for dependent coverage.[107]

Sixty seven percent of children under 18 received health insurance through private insurance in 1986, 16 percent received publicly sponsored health insurance, and 19 percent, or 10.6 million children, had no health insurance coverage.[108] These aggregate statistics mask key differences by family income, and parents' employment status. In 1986, 33 percent of children living in families with incomes less than the federal poverty level were uninsured.[109]

Over one-half of all uninsured children resided in families whose head was employed full-time and full-year. Another one-third of children without insurance lived in families whose head was a part-time or part-year worker. Only 12 percent of all uninsured children were from families with unemployed parents.[110]

Not surprisingly, access to health insurance affects access to services and health status. Only 11.3 percent of children under 18 who had no health insurance coverage reported excellent health in 1984, while 78.1 percent of children with private coverage reported excellent health.[111] Children who did not visit a doctor in the last year were twice as likely to be uninsured as compared to children who made more than four visits.[112]

According to a report by Actuarial Research Corporation, while coverage has increased in recent years, preventive care services are still not covered by the majority of health plans. The report cites the findings of INSURE, a demonstration project testing prevention as a health insurance benefit in the early to mid 1980s. Of the 1364 persons studied at three sites, 30 percent of the adults had preventive services covered, while 23 percent of the children had preventive services covered.[113]

Of the companies attending the WBGH/HRSA seminar, only about half provided coverage for well-child care. Texas Instruments is one company which will be implementing a program in January, 1990:

> "We're following the American Academy of Pediatrics' recommendation for immunization schedules. What we're doing is tying the health supervisory aspects of well baby care and exams directly to the immunization schedule. We're saying we will reimburse -- and deductibles and copayments do not apply -- up to our usual and customary fee for the exam and immunization... so we've linked these two procedures together."
>
> **Susan Nelson**
> **Corporate Insurance Manager**
> **Texas Instruments**

Preferred provider organizations (PPOs) seem to be an exception to the lack of coverage for preventive health care. Of the 197 PPOs with 18 million employees and dependents studied in a 1986 survey, 72 percent covered immunizations for children under two years of age, 75 percent covered well child care for children under two, and 56 percent covered well child care for children older than two.[114] A representative from Pepsico described their PPO program:

> "We put in a PPO with Metropolitan Life in January of 1989 for two of our divisions. The PPO covers three well baby care visits per year for each child two years of age or under. It also covers routine physicals up to $100 every two years. Employees are encouraged to use the PPO because they also receive $25 per visit up to 5 visits per year per family. The emphasis is to offer quality care and control costs."
>
> **Lori Gage**
> **Manager, Benefits Operations**
> **Pepsico**

SPECIAL ISSUES RELATING TO CHILD HEALTH CARE

Injury Prevention

Injuries are the leading cause of death in American children after the first year of life. Childhood injuries are very costly to American society. In 1980, it is estimated that injuries and poisonings (intentional and unintentional) accounted for 13.3 percent of acute medical care costs for children under age 17, or nearly $2 billion.[115] Injuries to children also result in huge indirect costs, owing to years of potential life lost and productivity foreclosed.

Vehicle-related injuries are by far the most common type of injury resulting in fatalities for children age 0-4. Other types of fatal injuries for this age group include fires and burns, drownings, choking, and falls.[116]

The OTA outlined three broad strategies for preventing accidental childhood injuries:

* Persuasion/education: persuading people to increase their self-protection (i.e., through education or reminders to use seatbelts).
* Regulation of behavior: requiring people to increase their self-protection(i.e. by passing laws requiring the use of seatbelts).
* Automatic protection: providing automatic protection from injury through product or environmental design (i.e. by designing automobiles so that a person is automatically seatbelted when in the vehicle).[117]

Regulation and automatic protection have been very effective in reducing deaths due to motor vehicles. By 1984, all 50 states had enacted laws requiring the use of safety restraints for children in automobiles. These laws contributed to the 36 percent decline in motor vehicle occupant deaths among children under age five between 1980 and 1984.[118]

Other examples of actions that could fall under one of the three prevention strategies include: helmets for bicyclists, barriers around swimming pools, universal use of smoke detectors, window bars in windows above the first floor, hot water heater temperatures of no more than 120 degrees Fahrenheit, and "no right turn on red" laws.[119]

In designing injury prevention strategies, the particular issues of children living in rural areas should be addressed, as farming is a very hazardous occupation. Farm machinery, such as tractors, wagons, combines and forklifts represent particular hazards to small children when not used safely.[120]

Firearm fatalities, one of the most preventable of all childhood fatalities, still accounts for at least 400 deaths annually among children - 45 of those to children under age 5. The number of unintentional firearm fatalities prompted the American Academy of Pediatrics to state in testimony, "You cannot be an advocate for child safety and ignore the issue of guns."[121]

Lead Poisoning

In addition to being a significant hazard facing young children, lead poisoning is an important measure of child health status as it indicates both the presence of a potentially disabling condition and the quality of the environment in which a child lives. While formerly considered a problem associated primarily with severe acute poisoning resulting from activities such as

ingestion of lead paint, lead toxicity is increasingly associated with chronic, low-level poisoning from exposure to contaminated air, soil and water.[122]

Lead poisoning can permanently damage the central nervous system of children and can lead to developmental delay, impaired intellectual development, and, in severe cases, death.

In a study conducted by the Department of Health and Human Services, researchers found that an estimated 3-4 million children younger than six had elevated blood lead levels in 1984. Children living in cities were more likely to be exposed to lead, with the highest prevalence of lead poisoning found among poor black children living in large inner cities.[123]

Lead screening has been determined to be highly cost effective. A June, 1982 report in the New England Journal of Medicine calculates that in areas where the prevalence of lead toxicity is 7 percent or more, lead screening averts morbidity and results in net dollar savings.[124]

Child Abuse and Neglect

The incidence of reported child abuse and neglect has increased, as has the visibility of the problem in the professional and lay community. Children under age three are more likely to suffer major physical abuse and are more likely to die from abuse or neglect than are older children.[125]

All 50 states and the District of Columbia have laws defining child maltreatment and mandating that professionals working with children report suspected cases. In 1985, 1.9 million cases of child maltreatment were reported.[126] The American Humane Association reports that 30 percent of the abused child population is under the age of 3. This represents 22 percent of the general population under age 3.[127]

OTA reports that few child maltreatment prevention programs have been evaluated to study their short-term and long-term outcomes. The use of home health visitors to families at high-risk for child maltreatment has been studied more than any other preventive approach. In four out of five studies of programs evaluated, researchers found that home care services were effective in reducing actual rates of child maltreatment. The elements of the programs which seem to be effective include reaching parents who lack self confidence and trust in formal service providers, obtaining a more accurate and direct assessment of the home environment, linking parents with other support services, and reminding parents that excessive punishment or neglect of children is not condoned in society.[128]

AIDS

AIDS is an increasingly serious problem among children. By April, 1989, 1,561 cases of AIDS in children younger than age 13 had been reported, representing 1.7 percent of all AIDS cases. The majority of pediatric AIDS cases resulted from transmission in utero or at birth by HIV infected mothers, with a disproportionate number of cases occurring in black and Hispanic children.[129]

According to the Children's Defense Fund, between January 1988 and January 1989, nearly 600 new cases were reported among children younger than 13 and the number of pediatric AIDS cases virtually doubled for each racial and ethnic group. The vast majority of young children with, and exposed to, perinatally transmitted AIDS live in poor, inner-city neighborhoods with high concentrations of minority families. Of the total number of pediatric AIDS cases reported since 1981, black children accounted for 52 percent of all cases and 56 percent of cases among children younger than five. In contrast, black children account for only 15 percent of all children younger than five.[130]

Employers and all of society will feel the impact of these tragic trends in two ways. First, the rising number of children with AIDS will demand more resources from an already strained public health and welfare system. However, the costs of care and the demand for resources are small in comparison to the costs our society will bear in terms of human life lost.

Mental Health

A substantial number of children in the United States suffer from seriously handicapping mental disorders. These disorders include a broad range of emotional disturbances involving depression, anxiety or both; behavioral problems characterized by disruptive and antisocial acts; and developmental conditions that limit a child's ability to think or learn, form social attachments or to communicate effectively with others.[131]

Young children's mental health problems are often related to environmental stressors such as poverty, parental divorce, and abuse and neglect. Many experts believe that children exposed to such environmental stressors, in addition to children with diagnosable disorders, are in need of preventive or other mental health services.[132]

A 1979 study in a New York county on the incidence of mental health problems in children seen by pediatricians found children under four represented 16 percent of the patients diagnosed with problems. The report found that children with a parent absent from home are twice as likely to be identified as having a problem as those living with both natural parents. In addition, more than 50

percent of those identified as having a mental health problem were "at least moderately impaired" by the condition.[133]

The issue of mental health was addressed at the WBGH/HRSA seminar, particularly in relation to the need for more training among pediatric providers regarding mental health:

> "I think there's been a tremendous advancement in the recognition by pediatricians that mental health is a very important part of pediatric practice. When you do surveys and ask pediatricians about their needs, particularly their needs in continuing medical education or did they receive adequate preparation during the training program, you will generally find a large percentage of pediatricians saying that they feel like they need more information, more training, better preparation on behavioral, developmental pediatrics... The Academy of Pediatrics has met with the American Board of Pediatrics, which is the certifying organization of pediatricians, pushing for more board requirements for behavioral developmental pediatrics."
>
> **Dr. Antoinette Eaton**
> **Vice President**
> **American Academy of Pediatrics**

Chronically Ill/Technology Dependent Children

While the majority of children are primarily healthy, a significant minority suffer from chronic health impairments which can emotionally and financially devastate families. Between 10 percent and 15 percent of all children suffer a chronic illness, with about 10 percent of these, or one million children, suffering a severe chronic illness.[134] Childhood chronic diseases include muscular dystrophy, cystic fibrosis, spina bifida, sickle cell anemia, chronic kidney disease, hemophilia, and other neuromuscular disorders.

Contributing to the numbers of the chronically ill, are children who formerly faced the probability of early death. Advances in the care and use of technology to aid extremely premature infants has led to the dramatic 55 percent decline in their death rates since 1969.[135] It has also led to new issues of chronic care and dependence on intensive medical interventions and technology.

The Task Force on Technology Dependent Children established by Congress in 1985 defined a "technology dependent child" as one who is under age 21, has a chronic disability, requires the routine use of a specific medical device to compensate for the loss of a life sustaining body function; and requires daily, ongoing care or monitoring by trained personnel.[136] Estimates of the size of the population of such children made by OTA range from 2,300 to 17,000.[137]

The Task Force reports that more than half of all children with major health problems are covered by some private health insurance. However, many of these plans do not provide coverage of catastrophic expenses associated with technology dependent

conditions such as durable medical equipment, home health aide services, outpatient professional nursing services, mental health counselling, and the spectrum of therapies.[138] Exclusion from plans based on pre-existing conditions is also a serious problem for this population. As Dr. McPherson noted about her work and discussions with families nationwide:

> "Families had insurance; it paid for major medical. But the kinds of home and community based services that we're talking about often were not available because there was no way to reimburse for them. And while we had demonstrated repeatedly that they gave us good outcomes for mothers and children, we really haven't solved how to finance these services."
>
> **Dr. Merle McPherson**
> **Director**
> **Division of Services for Children with Special Health Needs, CMCH**

The improvement in employer provisions for maximum lifetime benefits, out-of-pocket spending limits, and case management represent positive trends for families with chronically ill or technology dependent children. In 1984, almost 40 percent of participants in medium and large employer health plans had either unlimited lifetime benefits or a $1 million lifetime maximum.[139]

Case management, often implemented on a case-by-case basis, offers the opportunity for coverage of services that are not part of the regular benefit package. For example the coverage of home care services would be funded in lieu of hospital care. In a 1987 survey by a benefits consulting firm, less than 20 percent of surveyed employer health plans had incorporated individual case management into their benefits plan.[140]

Early Identification and Treatment

Early identification of children with special health care needs is a primary concern of parents, health care providers, social service professionals, and increasingly of public and private purchasers of health care. The principle behind early intervention programs is to prevent or minimize the adverse effects of a handicapping condition through early identification of the condition, designing subsequent strategies to facilitate the child's development and providing support for the family. Infants and young children who may need early intervention are those at risk of developing problems due to biological conditions (i.e. Downs syndrome), medically related factors (i.e. low birth weight) or environmental situations (i.e. parental drug abuse). It has been estimated that between 5 and 20 percent of children in the United States have chronic health impairments or significant developmental disabilities that require specialized health and related services.

Several federal/state initiatives are designed to target and serve children with special needs. The 1986 Education of the Handicapped Act Amendments (P.L. 99-457) established a new optional program of early intervention education to assist states in serving infants and toddlers with disabilities and to provide support services to their families. Infants and young children eligible for services include those a)experiencing developmental delays in cognitive, physical, language and speech, or psychosocial development or self-help skills or b)having a diagnosed physical or mental condition which has a high probability of resulting in developmental delay. Services designed to fit individual needs include family training, counseling and home visits; speech pathology and audiology; special instruction; occupational or physical therapy; psychological services; and medical care.

The Medicaid program, jointly administered by the federal government and states includes an early and periodic screening, diagnosis and treatment (EPSDT)program for children under age 21. In FY 1986 9.95 million children under 21 received Medicaid services, including 2.14 million screened under the EPSDT program.[141] Evaluation of the program has indicated fewer abnormalities at periodic exams among children who receive EPSDT preventive services than among those not receiving them and that health care costs are lower for children participating in the program.[142]

The Medicaid program has also authorized the use of innovative managed care programs targeting maternal and infant health:

> "I think, for years, you have always heard, 'Go to the private sector and learn your lessons, replicate it in the public sector.' This may be an area where the private sector may want to go to the Medicaid program and see what experience there has been in moving to managed care and targeted case management programs for pregnant women and children. We have three waiver programs which are operational. For example, in South Carolina, during their first two years of operation, the state saved over $3.2 million and decreased the infant mortality rate by ten percent."
>
> **Joyce Jackson**
> **Office of Eligibility Policy**
> **HCFA**

The Head Start program provides comprehensive services to low income and handicapped preschool children and their families to improve both learning and social skills and their health and nutrition so they may begin school better equipped to learn. Evaluation of children participating in Head Start program and other preschool education programs have shown the following results: increased school success; reduced dependence on public assistance; improved child self confidence, self esteem, and expectations; positive family effects; and cost effectiveness.[143] Despite this success, the number of children served by the program is problematic:

"Head Start serves almost half a million children, but this is less than 20 percent of the two and a half million kids who need the services. Hundreds of thousands of underprivileged preschoolers are on the Head Start waiting lists. Most of these children will never get into the program and those who do will almost always be limited to a one-year experience."

Dr. David Heppel
Director
Division of Maternal, Child and Infant Health, CMCH

Finally, a major national initiative in early intervention is being conducted by the federal Office of Maternal and Child Health with a view toward the provision of family-centered, community-based comprehensive services for children with special health needs. This effort includes the participation of a number of federal agencies and programs from the public and private sector, including those programs mentioned above.

PUBLIC-PRIVATE PARTNERSHIPS IN CHILD HEALTH

"We acknowledge at the federal level that we cannot succeed unless we are partners with business and industry, with state and local government and with private medical practitioners. We must begin working together, each with individual points of view and each with different resources, different skills, different opportunities. But only if we all work together can we really succeed with many of the problems that confront our nation today."

Dr. James O. Mason
Assistant Secretary for Health
Department of Health and Human Services

While corporate programs targeting child health issues are not as common as those addressing prenatal concerns, there are several public private partnerships that have focussed on children.

The Success by Six program is a community-wide effort in the city of Minneapolis to promote school readiness of the city's children by coordinating a continuum of comprehensive, community based services that support and assist all parents in meeting the needs of their children from conception through age five. In the words of Richard Green, Director of Community Programs at Honeywell, "We're trying to effect systemic change in Minneapolis."

The Success by Six program has three components. The first, a public education campaign, will include working with employer groups like the Chamber of Commerce to assess the ways in which their member companies' corporate policies support or don't support employee's families. The second program component involves strengthening neighborhood based coordination of maternal and child services. Currently Honeywell and the United Way of Minneapolis are involved in pilot testing a prenatal program called "Way to Grow" which involves training neighborhood paraprofessionals. If

successful, the program will be replicated in other Minneapolis neighborhoods and expanded to include health information relevant to pre-school children. Finally, the program involves increasing collaboration with other groups in the Minneapolis area to expand the reach of program information.

Another program initiated in 1985 in western Pennsylvania seeks to provide health insurance benefits to children under the age of 19. The Caring Program for Children of the Western Pennsylvania Caring Foundation has provided funding to purchase health insurance benefits for 12,000 children. The Foundation receives funding from a variety of sources including small employers and large corporations such as USX and Westinghouse. The funds are used to purchase health insurance from the Blue Cross of Western Pennsylvania and Pennsylvania Blue Shield. The insurance provides coverage for routine physician visits, immunizations, and outpatient hospital services. The program has been so successful that it is being replicated through Blue Cross/Blue Shield plans in several other states including Alabama, Maryland, Missouri, North Carolina, North Dakota, Kansas, and central New York. Currently, evaluation of the program's impact on the health status of the children participating is being conducted under a federal grant.

The role of local health care coalitions in creating or replicating innovative maternal and child health projects was discussed at the seminar:

> "There are over 100 coalitions nationwide made up of local purchasers which could be a tremendous resource in spreading the word on maternal and child health. We are working formally with 25 through the National Business Coalition Forum.
>
> Carol Cronin
> Vice President
> Washington Business Group on Health

CHAPTER FOUR

WORKING PARENTS' ISSUES

Introduction

Companies wishing to remain competitive will need to rethink their benefits policies and labor practices to accommodate the workforce of tomorrow. They will need to seek creative and innovative approaches for addressing maternal and child health care issues as mothers become a permanent part of the workforce and as more fathers become involved in caregiving activities. The combination of rigid work schedules and shortage of reliable and affordable child care can result in stress, lower productivity, and increased absenteeism as parents juggle work and child rearing responsibilities.

Several employers have already begun to address maternal and child health issues by altering their work policies or by developing innovative child care assistance programs to make it easier for parents to balance their work and family responsibilities. Union leaders and management have worked together to find solutions that match the specific needs of their workers. Public agencies, schools and businesses have joined forces to develop programs to improve community child care services. Employer initiatives across the country have eased the work-family conflicts of those parents involved, and employers have gained benefit through the improved work performance of parents.

A study by the U.S. Department of Labor revealed that more than 10 percent of the nation's employers provide specific benefits or services to help their workers arrange for child care and 50 percent have established work practices such as flexible work hours and leave policies, job-sharing and voluntary part-time arrangements that can help working parents care for their children.[144]

The survey also found that large businesses with more than 250 workers were much more likely to establish day care centers and provide financial services for child care than small employers. However, smaller businesses were more likely to allow flexible hours, extended leaves, job-sharing and temporary part-time arrangements, with reduced pay and benefits, to enable their employees to care for their children.[145]

ALTERNATIVE WORK ARRANGEMENTS

Many employers and employees are exploring innovative scheduling proposals. In recognition of the difficulty new parents may experience as they cope with the daily stresses of caring for a new child, many employers have introduced policies allowing for flexible work time. A flexible or reduced work schedule takes into account the special needs of new parents, and is particularly helpful in allowing employees to return to work sooner.

Flexible Scheduling

Flexible scheduling allows employees to choose arrival and departure times within a range set by the employer. All employees work during a core period and work the required number of hours daily. It has been estimated that 13 percent of the organizations employing 50 or more persons have introduced flex-time into their employment patterns.[146] The system allows for parents to choose their arrival and departure times to better match their child care services or the local school schedule.

The benefits of flex-time have become widely apparent to many of the companies which have instituted such policies. Some of the benefits they report include reduced absenteeism and tardiness and improved employee morale.

Part-Time Employment

In order to seek balance between work and family, many parents opt to work only part-time after the birth of a child. In 1985 the U.S. labor force was comprised of 27 percent women and 10 percent men in part time positions.[147] However, parents often sacrifice a great deal by changing to a part-time schedule, as the job is generally lower paying, fewer benefits are provided, and promotions and advancement are usually less available.

Many employers, however, are establishing part-time positions with pro-rated benefits and a ladder for advancement, particularly in certain industries such as retail and financial services. In a 1987 survey, the Chamber of Commerce found that in those industries where part-time employment comprised over 10 percent of the workforce (such as hospitals, banks, insurance companies and publishers), 18 percent of the firms reported that part-timers receive benefits. Overall, the Chamber found that 21.2 percent of firms offer health benefits to part-time employees.[148]

Part time positions assist parents in meeting family responsibilities while continuing with their careers. By offering part-time employment opportunities for new parents in a company,

the employer may be able to retain a trained worker who may have otherwise left the firm.

CHILD CARE PROGRAMS AND ASSISTANCE

One of the most critical concerns of employees today and in the future will be quality, cost-efficient child care services. Though a few companies are beginning to implement progressive programs for employees in need of child care services, many more have yet to address these intensifying work-family concerns. According to the U.S. Department of Labor, in 1988, only four percent of U.S. workers were eligible for employer-subsidized child care benefits, up from one percent in 1985. Six percent of white-collar workers were eligible for such benefits, compared with two percent of blue-collar workers. These benefits included reimbursement for child care expenses, as well as facilities provided by the employer.[149]

A study by the U.S. Census Bureau reported that over 29 million children, 9 million of them younger than 5, spend a portion of the day in a second home costing families over $14 billion in 1986. The average weekly payment for child care was about $45 per week or 6 percent of their monthly family income. The poorest women in the survey paid $32 a week. The wealthiest -- those with incomes of more than $3,750 a month -- paid $58 a week.[150]

Even if families can afford adequate child care facilities, many have trouble locating them. In a 1986 California survey, one out of every four of the 1,200 unemployed parents interviewed blamed inadequate child care arrangements as the reason for being unable to return to work or to attend training programs. About one-third of those surveyed were single parents.[151]

Also of concern to employers is the increasing number of working men who are assuming care giving responsibilities. Many of them are turning down promotions or transfers because of family and child care concerns.

In a study of Merck & Co. employees, Bank Street College of Education researchers found that supervisors insensitive to family responsibilities increased the level of stress and psychosomatic complaints of working fathers. Another study by Boston University of 1,600 employees in two major Northeast corporations found that working fathers are as likely to get depressed or unhappy as working mothers when they have increased household duties.[152]

Today, about 3,000 of the nation's large employers offer some form of child care assistance - ranging from on-site facilities to noon-time seminars on parent education or the art of screening babysitters.[153]

Direct Child Care Services

Direct child care services include employer provision of, or contribution to, child care centers, family day care homes, school-age child care programs, summer day camps, and programs for the mildly ill child. According to a corporate directory listing employers providing child care services in the U.S., all direct services have increased since 1982, and the number of company-sponsored centers increased from approximately 200 in 1982 to 700 in 1987.[154]

There are a wide range of direct child care services, and the type of program offered varies according to company size and the number of existing child care facilities available in the community. For example a child care center located on-site or near the worksite is more easily sponsored by a large employer or union. One advantage for the employee is that reliable child care is available which accommodates employees' work schedules. An on-site child care center is also a very visible program and creates a positive public image for the employer or union. However, one on-site center may only serve a portion of the employees, if workers are located at various sites at a distance from the center.

By keeping the child care center as part of the company, the employer retains control over quality and functioning, but is also liable for the center and responsible for its operation. Other employers may elect on-site and near-site centers to be run by a parent organization rather than the company, thus avoiding program management problems and reducing their liability.

A company can also hire a child care management business or a child care chain of centers to operate its center. By contracting with professionals, companies can also avoid including child care workers as company employees.

Consortium programs, in which a child care center is supported by several companies that share expenses, risks, and benefits, are yet another direct service alternative many companies have chosen. Under this type of program, cost and liabilities are shared. In addition, the program can be an effective recruitment tool, small employers can participate, and fluctuations in enrollment are reduced with multiple company participation. Disadvantages include possible limited space for each employer, a less convenient location for some employers, less individual control over quality, and potentially complicated negotiations.[155]

Child care home networks are coordinated systems of licensed family child care center homes. The network may be run by the employer or by an outside agency. Advantages to this type of arrangement include lower cost than on-site or consortium programs, a design that can meet flexible schedules, providers that are close to parents' homes, and the ability to reduce or expand the number

of providers. Drawbacks include possible high provider turnover, difficulty in ensuring quality, and possible high insurance costs.[156]

Resource and Referral (R&R)

Other companies are opting for R&R programs which offer greater flexibility for employees and lower start-up costs for the employer. These programs provide referral names for employees, often at lower cost than many community programs available, address a wide variety of child care needs, and stimulate an increase in child care providers.

The number of companies offering child care information services to employees has increased dramatically in the 1980s. Between 1984 and 1985, for example, the companies offering R&R programs increased from 300 to 500.[157] Child care referral agencies often provide child care referral, parent seminars and brochures for employees on choosing child care. Agencies also keep records on all requests for child care referrals, if referral is provided. Referral, however, does not increase the amount of community child care services available unless there is an aggressive resource component to increase the supply of care.

Parent seminars are also offered at many companies as the sole part of a company child care program. Parent seminars often are a part of R&R programs. The seminars are usually conducted during lunch breaks, release time from work, and after work hours. Seminar topics include child development, child care and work-family conflicts. A series of seminars may be designed to cover a particular topic, or a group of employees may meet regularly and choose topics of interest to the group. Seminars are offered at such companies as AT&T, Avon, CBS, Levi Strauss, Polaroid, and Time.[158]

Information concerning child care issues for employees is also communicated in the workplace through child care fairs, brochures, employee newsletters and publications, and videotapes. Employers often acquire information on child care centers from the local day care licensing agency, and may procure access to brochures on evaluating the quality of child care from local child care organizations and the licensing agencies.

The Ford Motor Company and the United Auto Workers (UAW) provide child care referral service for union employees in 26 plant locations. The program assists parents in locating quality child care providers and offers a 24-hour emergency telephone number that children or parents can call for help. The resource and referral offices allow third-shift workers to have dinner with their children in plant cafeterias and provide summer day-camp programs, safe-toy programs, assistance to families with handicapped children

and seminars for child care providers to acquaint them with the particular needs of Ford families. The referral options include day-care center, nursery schools, licensed day-care homes, and programs for school-age children.

According to consultants, other companies which sponsor R&R programs include Aetna, Contel, Digital, General Foods, IBM, Lockheed, Procter & Gamble, and Xerox.[159]

Financial Assistance

Another way in which employers are addressing the child care needs of employees is by providing financial assistance to help employees pay for the expense of care. Though financial assistance does not increase the number of services available in a community, it does ease the financial strain, or perhaps allows employees to choose a more reliable and better quality center. Employers' financial assistance has been in the form of discounts at community centers, subsidies for a percentage of the child care expenses or a tax savings through a salary set aside program.

Employer discounts and subsidies occur through a variety of arrangements. For example, an employer may provide a flat amount, or subsidize a percentage of the child care expenses, for all employees or only for low income employees. The employer may pay the child care provider directly or reimburse the parents for child care expenses. The eligible child care arrangements for which a parent can receive a subsidy varies among employers.

Employers also offer child care subsidies as one option within a flexible benefit plan, a plan which allows employees to choose benefits from among two or more alternatives. Employers hesitate to offer child care services as a fixed benefit because only a small proportion of employees need the services each year, but an employer can add child care services to a flexible benefits package without being concerned about equity issues.

Hewitt & Associates, Minneapolis, MN, estimates that approximately 20 percent of major employers have flexible benefits plans, and 80 percent of those plans include a flexible spending account, either employer-funded or employee-funded, that can be used for child care expenses.[160]

Flexible spending accounts are funded by an employer contribution or through a salary reduction agreement with the employee. If an employer meets the Internal Revenue Service requirements for a Dependent Care Assistance Program and a Flexible Benefits Program, each employee can reduce his or her salary by as much as $5,000 a year and place that money into a flexible spending account which can be used to pay for eligible child care services with pretax dollars.

Public-Private Partnerships Providing Child Care Services

Employers interested in accessing those services already existing within the community are forging ahead to create partnerships with public agencies providing child care services. Partnership projects have increased the supply of child care services and improved the quality of care through provider training programs. By providing financial assistance and leadership, an employer can work with other groups in assessing a community's needs and developing a strategy for child care expansion.

Examples of such partnerships include statewide programs, city projects, and the expansion of family day care homes. For example the Texas Department of Human Resources and the Levi Strauss Foundation formed the Corporate Child Development Fund of Texas in 1979. The Fund uses private industry donations to support community-based child care programs in smaller towns and in rural areas of Texas.

In Los Angeles, a consortium was formed to develop a child care center to serve the downtown area. The Alliance of Business for Childcare Development (ABCD) is a consortium of downtown public and private employers and voluntary organizations. ABCD has opened one child care center and plans to create three additional centers by the end of 1990 for a total capacity of 300 children from 6 weeks to five years of age. ABCD develops the centers and gives preferential enrollment to employees of contributing companies.

CONCLUSION

As employers plan for the workforce of the future, maternal and child health issues will become increasingly important. An indication of the growing corporate recognition of these issues is seen in the recent development of corporate departments or taskforces examining the interaction between work and family. The departments focus on a wide range of issues including childcare and eldercare, alternative work schedules, employee benefits planning and employee productivity. Recognition of the positive or negative role worksites can play in promoting healthy families and indirectly healthy communities is a natural extension of the generally accepted idea that worksites can promote individual health and well-being.

Another factor increasing the visibility of maternal and child health and family issues for employers is the level of public policy activity addressing these issues. Child care; parental leave; access to health care for pregnant women and children through Medicaid expansion, tax credits or employer mandates; malpractice issues affecting the availability of obstetrical care; childhood prevention funding and research; teenage pregnancy; and infant mortality are all the subject of legislation being considered at the state or federal level. Through local, state and national coalitions, employers are working with other interested parties to help insure the health and productivity of the nation's future workforce. As one participant noted:

> "We need to create a vision. We don't have the vision of what should be there for our moms and kids in America. Where we have to go is to convince all the players -- several of the companies here are convinced that these issues are important. But we have to have the entire population convinced that this is where we should invest a significant amount of our resources, whether they be dollars or personnel or both."
>
> **Jim Guilty, M.D.**
> **President**
> **Association of Maternal and Child Health Programs**

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APPENDIX A

MATERNAL AND CHILD HEALTH RESOURCE LIST

The Alan Guttmacher Institute
11 Fifth Avenue
New York, NY 10003
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American Academy of Pediatrics
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Elk Grove Village, IL 60009-0927
(312) 228-5005

American College of Obstetricians and Gynecologists
600 Maryland Avenue, S.W., Suite 300 East
Washington, DC 20024-2588
(202) 638-5577

Association for the Care of Children's Health
3615 Wisconsin Avenue, N.W.
Washington, DC 20016
(202) 244-1801

Association of Maternal and Child Health Promotion
2001 L Street, N.W., Suite 308
Washington, DC 20036
(202) 775-0436

Catalyst
250 Park Avenue, South
New York, NY 10003
(212) 777-8900

Children's Defense Fund
122 C Street, N.W.
Washington, DC 20001
(202) 628-8787

Health Insurance Association of America
1025 Connecticut Avenue, N.W.
Washington, DC 20036-3998
(202) 223-7780

Healthy Mothers, Health Babies Coalition
409 12th Street, S.W.
Washington, DC 20024
(202) 638-5577

Institute of Medicine, National Academy of Sciences
Committee to Study Prevention of Low Birth Weight
2101 Constitution Avenue, N.W.
Washington, DC 20418
(202) 334-2000

March of Dimes Birth Defects Foundation
1275 Mamaroneck, Avenue
White Plains, NY 10605
(914) 997-4640

National Association for the Education of Young Children
1834 Connecticut Avenue, N.W.
Washington, DC 20009
(202) 232-8777 or (800) 424-2460

National Center for Clinical Infant Programs
733 15th Street, N.W., Suite 912
Washington, DC 20005
(202) 347-0308

National Center for Maternal and Child Health Education
38th and R Streets, N.W.
Washington, DC 20057
(202) 625-8400

National Commission on Children
1111 18th Street, N.W., Suite 810
Washington, DC 20036
(202) 254-3800

National Commission to Prevent Infant Mortality
Switzer Building, Room 2006, 330 C Street, S.W.
Washington, DC 20201
(202) 472-1364

Office of Technology Assessment, U.S. Congress
Congressional and Public Affairs Office
Washington, 20510-8025
(202) 224-9241

Public Citizen Health Research Group
2000 P Street, N.W.
Washington, DC 20036
(202) 872-0320

Select Committee on Children, Youth, and Families
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Southern Governor's Association
444 North Capitol Street, N.W., #240
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U.S. Department of Health and Human Services
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APPENDIX B

Washington Business Group on Health

HRSA/WBGH
LEADERSHIP SEMINAR ON MATERNAL AND CHILD HEALTH

November 8-9, 1989
Washington, D.C.

AGENDA

November 8, 1989

9:00 **Registration and Coffee**

10:00 **Welcoming Remarks**

Willis B. Goldbeck
President
Washington Business Group on Health (WBGH)

John H. Kelso
Acting Administrator
Health Resources and Services Administration
Department of Health and Human Services (DHHS)

Maternal and Child Health Programs - An Overview

Merle McPherson, M.D.
Director
Division of Services for Children with Special Health Needs
DHHS

Corporate Perspective on Maternal and Child Health - An Overview

Carol Cronin
Vice President
Washington Business Group on Health

11:00 **Federal Perspectives on Maternal and Child Health Issues**

Audrey Manley, M.D.
Deputy Assistant Secretary for Health
U.S. Public Health Service
DHHS

229½ Pennsylvania Avenue, S.E., Washington, D.C. 20003 (202) 547-6644 • FAX: (202) 547-0014

11:30 **Maternal and Child Health Programs and Epidemiology**

David Heppel, M.D.
Director
Division of Maternal and Child and Infant Health
DHHS

Woodie Kessel, M.D., M.P.H.
Director
Division of Maternal and Child Health Program Coordination and Systems Development
DHHS

12:30 **Lunch**

James O. Mason, M.D., Dr. P.H.
Assistant Secretary for Health
DHHS

2:00 **Corporate Examples of Maternal Programs**

Mara Puri
Health Benefits Department
Marriott Corporation

Charlie Newman
Program Manager, Health Care Management
General Electric

2:30 **Roundtable Discussion**

- Prenatal care
- Maternal health/disability benefits

5:00 **Reception**

November 9, 1989

9:00 **Roundtable Discussion**

- Well child care
- Childhood prevention strategies
- Mental health

11:30 **Adjournment**

Washington Business Group on Health

HRSA/WBGH

SEMINAR ON MATERNAL AND CHILD HEALTH
NOVEMBER 8-9, 1989

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